Scanning Electron Microscope (SEM) Morphology Anisakidae on Grouper Fish from Pacitan Sea

Yudik Rizky Rideanul Alim

ABSTRACT

This study aims to determine the type of profile morphology Anisakidae, the prevalence, degree infection, and correlation lengths of Anisakidae in the grouper *(Epinephelus coioides*) from Pacitan sea. Sample of this research is taken from 30 individuals grouper with weight ≤ 0.3 kg and > 0.3 kg. Larvae of Anisakidae wes observed in the abdominal cavity, visceral organs and the musculus. The Anisakidae larva Identification performed by glycerin dyeing, carmine staining and through Scanning Electron Microscope (SEM). The results showed that the Anisakidae found in grouper was *Anisakis* type 1, *Pseudoterranova* sp. and *Terranova* sp. *Anisakis* type I have white transparent color with the length in 14-22 mm, ventrikulus in 0.64-0.67 mm and mukron in 16.8 µm. *Pseudoterranova* sp. and *Terranova* sp. have a reddish brown or yellow color with length in 8-10 mm, while is *Pseudoterranova* sp. have mukron whose length 12.3 µm and in *Terranova* sp. mukron is absen. Prevalence, degree infection, and correlation length of Anisakidae in the grouper have shown a correlation with the weight of the grouper fish. Larger groupers show higher prevalence, degree of infection and longer larvae than smaller groupers.

***Keywords*:** *Anisakis* type I, *Pseudoterranova* sp., *Terranova* sp., *Scanning Electron Microscope* (SEM), Grouper *(Epinephelus coioides*)